Serial Number: 09/993,465 Filing Date: November 14, 2001

Fitle: USE OF CARBOHYDRATE SOLUTIONS TO FACILITATE DRUG DELIVERY



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Please amend the claims as follows:

1. (Currently Amended) A method for increasing the transport of a nucleoside or nucleoside analog biologically active agent into mammalian cells comprising:

contacting the cells with a medicament comprising the nucleoside or nucleoside analog agent and at least one carbohydrate,

so that the carbohydrate enhances the absorption of the nucleoside or nucleoside analog agent into the cells relative to the absorption of the nucleoside or nucleoside analog agent in the medicament lacking carbohydrate.

Claims 2-23 (Canceled).

24. (Currently Amended) The method of claim 1 23 wherein the nucleoside analog is acyclovir.

Claims 25-31 (Canceled).

- 32. (Previously Presented) An aqueous solution comprising at least one carbohydrate and acyclovir, wherein the weight ratio of total carbohydrate to acyclovir is at least about 7:1.
- 33. (Previously Presented) A method of administering a therapeutically effective amount of an amino acid to treat a physiological disorder of a mammalian subject, comprising:
  - preparing a composition comprising a therapeutically effective amount of an (a) amino acid, and at least one carbohydrate; and
  - (b) contacting the composition with the cells of the subject, so as to administer an effective amount of the amino acid to the subject; wherein the weight ratio of total carbohydrate to amino acid is about 4:1 to 15:1 in aqueous solution, either after preparation with aqueous solvent or after delivery in

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the aqueous environment surrounding the cells, wherein the carbohydrate enhances the absorption of the agent into the cells relative to the absorption of the agent in the medicament lacking carbohydrate.

- 34. (Previously Presented) A method of administering a therapeutically effective amount of an amino acid to treat a physiological disorder of a mammalian subject, comprising:
  - (a) preparing a composition comprising a therapeutically effective amount of an amino acid, and at least one carbohydrate; and
  - (b) contacting the composition with the cells of the subject, so as to administer an effective amount of the amino acid to the subject

wherein the weight ratio of total carbohydrate to amino acid is at least 7:1 in aqueous solution, either after preparation with aqueous solvent or after delivery in the aqueous environment surrounding the cells, wherein the carbohydrate enhances the absorption of the agent into the cells relative to the absorption of the agent in the medicament lacking carbohydrate.

- 35. (Previously Presented) The method of claim 33 or 34 wherein the composition comprises an aqueous vehicle.
- 36. (Previously Presented) The method of claim 33 or 34 wherein the amino acid is chosen from amino acids with a solubility of less than about 5 grams per 100 milliliters of water.
- 37. (Previously Presented) The method of claim 33 or 34 wherein the amino acid is glutamine.
- 38. (Previously Presented) The method of claim 37 wherein the physiological disorder comprises epithelial tissue damage to the gastrointestinal tract.
- 39. (Previously Presented) The method of claim 33 or 34 wherein the physiological disorder comprises abnormal amino acid metabolism.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.111

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40. (Previously Presented) The method of claim 33 or 34 wherein the physiological disorder comprises decreased amino acid absorption.